

Title (en)

CAUSALITY DETERMINATION OF UPGRADE REGRESSIONS VIA COMPARISONS OF TELEMETRY DATA

Title (de)

KAUSALITÄTSBESTIMMUNG VON AKTUALISIERUNGSREGRESSIONEN ÜBER VERGLEICHE VON TELEMETRIEDATEN

Title (fr)

DÉTERMINATION DE CAUSALITÉ DE RÉGRESSIONS DE MISE À NIVEAU PAR DES COMPARAISONS DE DONNÉES DE TÉLÉMESURE

Publication

**EP 4122163 A1 20230125 (EN)**

Application

**EP 21706090 A 20210121**

Priority

- US 202016820631 A 20200316
- US 2021014474 W 20210121

Abstract (en)

[origin: US2021286614A1] Disclosed herein is a system for automating the causality detection process when upgrades are deployed to different resources that provide a service. The resources can include physical and/or virtual resources (e.g., processing, storage, and/or networking resources) that are divided into different, geographically dispersed, resource units. To determine whether a root cause of a problem is associated with an upgrade event that has recently been deployed, a system is configured to use telemetry data to compute an upgrade-to-upgrade score that represents differences between two different upgrade events that are deployed to the same resource unit. The system is further configured to use telemetry data to compute an upgrade unit-to-unit score that represents differences between the same upgrade event being deployed to two different resource units. The scores can be used to output an alert, for an analyst, that signals whether a recently deployed upgrade event is the cause of a problem.

CPC (source: EP US)

**G06F 8/658** (2018.01 - US); **G06F 11/1433** (2013.01 - US); **H04L 41/0631** (2013.01 - EP); **H04L 41/082** (2013.01 - EP);  
**H04L 41/0895** (2022.05 - EP); **H04L 41/145** (2013.01 - EP); **H04L 41/40** (2022.05 - EP); **H04L 67/10** (2013.01 - US); **H04L 67/34** (2013.01 - US);  
**G06F 2201/865** (2013.01 - US); **H04L 41/22** (2013.01 - EP); **H04L 43/08** (2013.01 - EP); **H04L 43/16** (2013.01 - EP)

Citation (search report)

See references of WO 2021188196A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**US 11567756 B2 20230131; US 2021286614 A1 20210916;** EP 4122163 A1 20230125; WO 2021188196 A1 20210923

DOCDB simple family (application)

**US 202016820631 A 20200316;** EP 21706090 A 20210121; US 2021014474 W 20210121